

## A B S T R A C T

An optical device (D) is dedicated to transforming the propagation mode of optical signals. The device  
5 comprises mode transformation means (3-5) associated with a multimode fiber (2) and comprising first and second mode converters (3 and 5) coupled to each other by a multimode fiber portion (4) of selected length (L). The first converter (3) is fed with signals propagating in a  
10 first mode and it delivers the signals to the fiber portion (4) in part in the first mode and in part in a second mode of order higher than the first, and the second converter (5) is arranged to cause the signals in the first and second modes to interfere so that on outlet  
15 therefrom they present a selected spectral spacing.